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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,804	10/15/2001	John Frederick Parker	8-02-6018	3524

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EXAMINER

TRIEU, THAI BA

ART UNIT	PAPER NUMBER
3748	2

DATE MAILED: 10/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,804

Applicant(s)

PARKER ET AL.

Examiner

Thai-Ba Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character **"3"** has been used to designate both **"drive gear"** (See Page 4, line 10) and **"sandwiches gear"** (See Page 4, line 21). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character **"11"** has been used to designate both **"integral sleeve"** (See Page 4, line 19) and **"inner bearing surface"** (See Page 4, line 29). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show **"annular groove 19"** (See Page 6, lines 16-17) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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Specification

The disclosure is objected to because of the following informalities:

- On Page 5, line 4, "**Passage 16a**" should be replaced by -- **Passages 16** --.

Appropriate correction is required.

Claim Objections

Claims 1-10 are objected to because of the following informalities:

- In claim 1, line 9, "**they**" before "**rotate**" should be replaced by -- **said first and second bearings** --.

- In claims 2-10, line 1, "**Apparatus**" should be replaced by -- **The power turbine** --.

- In claim 7, line 2, "**apparatus**" should be replaced by -- **power turbine** --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Thoren (Patent Number 4,902,144).

Regarding claims 1-4, Thoren discloses a power turbine comprising:

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a drive shaft (12) supporting at one end a turbine (20) arranged in use to be driven by exhaust gases from an internal combustion engine and supporting at the other end a drive connection which in use is coupled to a load demand of the internal combustion engine, wherein the shaft (12) is supported in a housing by a first bearing (14) adjacent to the turbine and a second bearing (15) adjacent the drive coupling, the first and second bearings (14, 15) each defining an inner bearing surface relative to which the shaft rotates and an outer bearing surface which rotates relative to the housing, and the first and second bearings (14, 15) are mechanically coupled together such that they rotate relative to the housing at the same speed;

wherein the first and second bearings (14, 15) are formed from a single tubular body through which the shaft (12) extends;

wherein the first and second bearings (14, 15) are separate components interconnected by a tubular body through which the shaft (12) extends (See Figure 1, Column 2, lines 23-68, Column 3, lines 1-2);

wherein the tubular body defines radial apertures to provide oil drainage passage ways (via ports 36,37) (See Column 4, lines 33-37).

Regarding claims 5-10, Thoren further said housing having passageways (via 32, 34, 35, 36, 37) formed therein for connecting a supply of pressurized lubricant to said first and second bearings (14, 15) (See Column 4, lines 20-37).

the first and second bearings (14, 15) defining axially-facing end surfaces which bear against retaining shoulders, the radial thickness of the end surfaces being less

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than or equal to the radial spacing between the inner and outer bearing surfaces (See Abstract, Figure 1);

wherein said drive shaft (12) has a shoulder against which one of said axially-facing end surfaces is positioned, said apparatus further comprising means for forming a thrust bearing adjacent the other of said axially-facing end surfaces, whereby the axial excursions of said shaft are restrained (See Column 4, lines 63-68, and Column 5, lines 1-29);

wherein said housing has passageways (via 32, 34, 35, 36, 37) formed therein for connecting a supply of pressurized lubricant to said thrust bearing means (See Column 5, lines 30-58).

wherein said housing has passageways (via 32, 34, 35, 36, 37) formed therein for connecting a supply of pressurized lubricant to said first and second bearings (14, 15).

wherein said housing has a common passageway for connecting a supply of pressurized lubricant to said thrust bearing means (58) and to said first and second bearings (14,15) (See Column 5, lines 45-58).

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by McInerney (Patent number 3,811,741), or Aguilar (Patent 6,017,184), or Okano (Patent Number 4,358,253).

(See the entire document).

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Munkel et al. (US Patent Number 5,207,566) disclose exhaust gas turbocharger bearing.
- Fujikakae et al. (US Patent Number 4,735,556) disclose a turbocharger.
- Zloch et al. (US Patent Number 4,738,548) disclose an exhaust gas turbocharger.
- MacInnes et al. (US Patent Number 3,969,804) disclose bearing housing assembly method for high rotating shafts.
- Blake (US Patent Number 4,427,309) discloses turbocharger shaft bearing.
- Reisdorf (US Patent Number 5,454,646) discloses journal bearing for use with high-speed shafting.
- Allen et al. (US Patent Number 6,449,950 B1) disclose a rotor and bearing for electrically assisted turbocharger.
- Heimark (US Patent Number 6,082,340) discloses two speed supercharger.
- Allen et al. (Patent Number WO 02/23047 A1) disclose a rotor and bearing for electrically assisted turbocharger.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-

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6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00), first and second Fridays off.

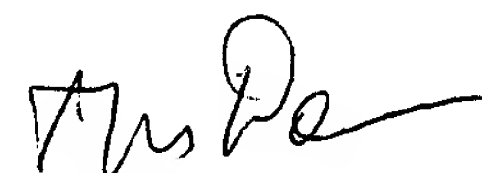
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9302 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

TTB
October 23, 2002



Thai-Ba Trieu
Patent Examiner
Art Unit 3748



THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700